

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP) RENEWAL
OFFICE OF AIR QUALITY**

**Jefferson Smurfit Corporation (U.S.)
102 West Superior Street
Fort Wayne, Indiana 46802-1283**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F 003-14129-00033	
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: March 28, 2002 Expiration Date: March 28, 2007

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary paperboard folding carton manufacturing source.

Authorized Individual:	Jim R. Stanley
Source Address:	102 West Superior Street, Fort Wayne, Indiana 46802-1283
Mailing Address:	102 West Superior Street, Fort Wayne, Indiana 46802-1283
General Source Phone Number:	260-461-7200
SIC Code:	2657
County Location:	Allen
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) natural gas fired boiler, identified as B1, installed prior to June 8, 1972, exhausting to Stack B1, rated at 4.2 million British thermal units per hour.
- (b) One (1) natural gas fired boiler, identified as B2/3, installed in 2001, exhausting to Stack B2/3, rated at 4.2 million British thermal units per hour.
- (c) One (1) natural gas fired boiler, identified as B4/5A, installed prior to June 8, 1972, exhausting to Stack B4/5, rated at 4.2 million British thermal units per hour.
- (d) One (1) natural gas fired boiler, identified as B4/5B, installed prior to June 8, 1972, exhausting to Stack B4/5, rated at 4.2 million British thermal units per hour.
- (e) One (1) sheet-fed (non-heatset) printing press with no control equipment, identified as P-120, installed in 1989, with a maximum print width of 40 inches, capacity: 500 feet per minute.
- (f) One (1) sheet-fed (non-heatset) printing press with no control equipment, identified as P-100, installed in 1997, with a maximum print width of 40 inches, capacity: 583 feet per minute.
- (g) One (1) sheet-fed (non-heatset) printing press with no control equipment, identified as P-140, installed in 2001, with a maximum print width of 55.12 inches, capacity: 547 feet per minute.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Maintenance cleaning and painting
- (b) Experimental material evaluations
- (c) Maintenance parts cleaning
- (d) Washroom exhaust fans, ventilation and air conditioning equipment
- (e) Air compressor operations
- (f) Stacking station dust (326 IAC 6-3-2)
- (g) Sheeting, cutting, stripping, finishing, and packaging of paperboard (326 IAC 6-3-2)
- (h) Plate room activities

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

SECTION B

GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual"

as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]

- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; and
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs), including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section)
or,

Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

Failure to notify IDEM, OAQ, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
 - (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed under 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are

applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

- (f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.8 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.10 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented upon issuance of this permit. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.12 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP).

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.14 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.15 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.16 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (a) One (1) natural gas fired boiler, identified as B1, installed prior to June 8, 1972, exhausting to Stack B1, rated at 4.2 million British thermal units per hour.
- (b) One (1) natural gas fired boiler, identified as B2/3, installed in 2001, exhausting to Stack B2/3, rated at 4.2 million British thermal units per hour.
- (c) One (1) natural gas fired boiler, identified as B4/5A, installed prior to June 8, 1972, exhausting to Stack B4/5, rated at 4.2 million British thermal units per hour.
- (d) One (1) natural gas fired boiler, identified as B4/5B, installed prior to June 8, 1972, exhausting to Stack B4/5, rated at 4.2 million British thermal units per hour.
- (e) One (1) sheet-fed (non-heatset) printing press with no control equipment, identified as P-120, installed in 1989, with a maximum print width of 40 inches, capacity: 500 feet per minute.
- (f) One (1) sheet-fed (non-heatset) printing press with no control equipment, identified as P-100, installed in 1997, with a maximum print width of 40 inches, capacity: 583 feet per minute.
- (g) One (1) sheet-fed (non-heatset) printing press with no control equipment, identified as P-140, installed in 2001, with a maximum print width of 55.12 inches, capacity: 547 feet per minute.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 2-8-4] [326 IAC 8-1-6]

- (a) The total volatile organic compound (VOC) input including the usage of wash-up or clean-up solvents from the three (3) sheet-fed (non-heatset) printing presses shall each be restricted in order to limit the VOC emissions to less than twenty-five (25) tons per twelve (12) consecutive month period, each.
- (b) The volatile content of each of the printing inks, shall be multiplied by a 5% emission factor to obtain VOC emissions, and the varnish and aqueous coatings shall be multiplied by a 60% emission factor to obtain VOC emissions.
- (c) The volatile content of each of the solvents, washes and solutions shall be multiplied by a 100% emission factor to obtain VOC emissions.
- (d) This will limit the VOC emissions from the paperboard folding carton manufacturing source, to less than one hundred (100) tons per year. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 8-1-6 do not apply.

D.1.2 Hazardous Air Pollutants (HAPs) Limitations [326 IAC 2-8-4]

- (a) The amount of any single HAP input including any HAP used for wash-up or clean-up from all presses, the four (4) natural gas fired boilers and from the insignificant activities shall be restricted in order to limit the single HAP emissions to less than ten (10) tons per twelve (12) month period, rolled on a monthly basis. Therefore, the requirements of 326 IAC 2-7 (Part 70) are not applicable.

- (b) The amount of any combination of HAPs input including the usage of wash-up or clean-up from all presses, the four (4) natural gas fired boilers and from the insignificant activities shall be restricted in order to limit the combined HAP emissions to less than twenty-five (25) tons per twelve (12) month period, rolled on a monthly basis. Therefore, the requirements of 326 IAC 2-7 (Part 70) are no applicable.
- (c) The facilities are deemed a area source for hazardous air pollutants.

D.1.3 Particulate Matter (PM) [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3(d), the allowable PM emission rate from the three (3) natural gas fired boilers, identified as B1, B4/5A, and B4/5B shall not exceed 0.8 pounds per million British thermal units heat input, each.

D.1.4 Particulate Matter (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983), the allowable PM emission rate from the one (1) boiler, identified as B2/3 shall not exceed 0.523 pounds per million British thermal units per hour when operating at 4.2 million British thermal units per hour heat input. This boiler is in compliance with this rule based on supporting calculations.

The emission limitation is based on the following equation:

$$Pt = 1.09/Q0.26$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/mmBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

Compliance Determination Requirements

D.1.5 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by ink, varnish and coating manufacturers.

D.1.6 VOC Emissions

Compliance with Condition D.1.1 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the twelve (12) month period.

D.1.7 Hazardous Air Pollutants (HAPs)

Compliance with the HAPs usage limitations contained in Condition D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the manufacturer.

D.1.8 Hazardous Air Pollutants (HAPs) Emissions

Compliance with Condition D.1.2 shall be demonstrated within 30 days of the end of each month

based on the total single and combination of HAPs usage for the month.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

There are no specific Compliance Monitoring Requirements applicable to these emission units.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.9 Record Keeping Requirements

-
- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1.
- (1) The amount and VOC content of each ink, varnish and coating material used on a monthly basis. Records shall include information from supplier formulation data, supplier sales and consumption data, purchase orders or requisitions, invoices and Material Safety Data Sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents, if any;
 - (2) The cleanup solvent usage for each month;
 - (3) The total VOC usage for each month; and
 - (4) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (4) below for all significant and insignificant emission units. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the HAP usage limits established in Condition D.1.2.
- (1) The amount and HAP content of each ink, varnish and coating material used on a monthly basis. Records shall include information from supplier formulation data, supplier sales and consumption data, purchase orders or requisitions, invoices and Material Safety Data Sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents, if any;
 - (2) The cleanup solvent usage for each month;
 - (3) The total single and combination of HAPs usage for each month; and
 - (4) The weight of single and combination HAPs emitted for each compliance period.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(f) Stacking station dust (326 IAC 6-3-2)

(g) Sheeting, cutting, stripping, finishing, and packaging of paperboard (326 IAC 6-3-2)

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the stacking station, sheeting, cutting, stripping, finishing, and packaging of the paperboard facilities shall not exceed the allowable emission rate of particulate matter per hour as determined by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Compliance Determination Requirements

There are no specific Compliance Determination Requirements applicable to these emission units.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

There are no specific Compliance Monitoring Requirements applicable to these emission units.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Jefferson Smurfit Corporation (U.S.)
Source Address: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
Mailing Address: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
FESOP No.: F 003-14129-00033

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT**

Source Name: Jefferson Smurfit Corporation (U.S.)
Source Address: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
Mailing Address: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
FESOP No.: F 003-14129-00033

This form consists of 2 pages

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9 This is an emergency as defined in 326 IAC 2-7-1(12)
CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Jefferson Smurfit Corporation (U.S.)
Source Address: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
Mailing Address: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
FESOP No.: F 003-14129-00033
Facility: Three (3) sheet-fed (non-heatset) printing presses
Parameter: Total VOC
Limit: Less than twenty-five (25) tons per year, each. The volatile content of each of the printing inks, shall be multiplied by a 5% emission factor and the volatile content of each varnish and aqueous coatings shall be multiplied by a 60% emission factor to obtain VOC emissions. The volatile content of each of the solvents, washes and solutions shall be multiplied by a 100% emission factor to obtain VOC emissions.

YEAR: _____ Month _____

Facility ID	Month	VOC Emitted This Month	VOC Emitted Previous 11 Months	VOC Emitted 12 Month Total
Press P-100	Month 1			
	Month 2			
	Month 3			
Press P-120	Month 1			
	Month 2			
	Month 3			
Press P-140	Month 1			
	Month 2			
	Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Note: This report shall include a detailed spreadsheet with the raw material usage, showing on how the emissions were derived.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Jefferson Smurfit Corporation (U.S.)
Source Address: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
Mailing Address: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
FESOP No.: F 003-14129-00033
Facility: Entire Source
Parameter: Total worst case single HAP
Limit: Less than ten (10) tons per twelve (12) consecutive month period

YEAR: _____ Month _____

Month	Single HAP Emitted This Month	Single HAP Emitted Previous 11 Months	Single HAP Emitted 12 Month Total	Combined HAP Emitted This Month	Combined HAP Emitted Previous 11 Months	Combined HAP Emitted 12 Month Total
Month 1						
Month 2						
Month 3						

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Note: This report shall include a detailed spreadsheet with the raw material usage, showing on how the emissions were derived.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Jefferson Smurfit Corporation (U.S.)
Source Address: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
Mailing Address: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
FESOP No.: F 003-14129-00033

Months: _____ to _____ Year: _____

Page 1 of 2

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management
Office of Air Quality**

Addendum to the
Technical Support Document for Federally Enforceable State Operating Permit
(FESOP) Renewal

**Jefferson Smurfit Corporation (U.S.)
102 West Superior Street, Fort Wayne, Indiana 46802-1283**

F 003-14129, Plt ID 003-00033

On October 17, 2001, the Office of Air Quality (OAQ) had a notice published in the Fort Wayne Journal Gazette, Fort Wayne, Indiana, stating that Jefferson Smurfit Corporation (U.S.) had applied for a Federally Enforceable State Operating Permit (FESOP) Renewal to operate a paperboard folding carton manufacturing source with control. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On October 29, 2001, Dale A. Gerber of Jefferson Smurfit Corporation (U.S.) submitted comments on the proposed FESOP Renewal. The summary of the comments is as follows:

Comment 1:

Page 4 – Section A.2(e) – Source Summary

The emissions from all our sheet-fed non-heatset offset printing presses are fugitive. There is no control equipment on press 120 to regulate or reduce emissions. The description in our original permit was a clearer representation and the words “no control equipment” should be added back for the sake of accuracy.

Comment 2:

Page 4 – Section A.2(f) – Source Summary

The emissions from all our sheet-fed non-heatset offset printing presses are fugitive. There is no control equipment on press 100 to regulate or reduce emissions. The description in our original permit was a clearer representation and the words “no control equipment” should be added back for the sake of accuracy. This language was reaffirmed in IDEM’s letter of April 2, 1997 when the original permitted press was replaced with the existing press.

Comment 3:

Page 4 – Section A.2(g) – Source Summary

The emissions from all our sheet-fed non-heatset offset printing presses are fugitive. There is no control equipment on press 140 to regulate or reduce emissions. The description in our original permit was a clearer representation and the words “no control equipment” should be added back for the sake of accuracy. This language was reaffirmed in IDEM’s letter of January 26, 2001 when the original permitted press was replaced with the existing press.

Responses 1, 2, and 3:

This wording was incorporated into the permit prior to public notice as shown below. Therefore, there are no changes required.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (e) One (1) sheet-fed (non-heatset) printing press with no control equipment, identified as P-120, installed in 1989, with a maximum print width of 40 inches, capacity: 500 feet per minute.
- (f) One (1) sheet-fed (non-heatset) printing press with no control equipment, identified as P-100, installed in 1997, with a maximum print width of 40 inches, capacity: 583 feet per minute.
- (g) One (1) sheet-fed (non-heatset) printing press with no control equipment, identified as P-140, installed in 2001, with a maximum print width of 55.12 inches, capacity: 547 feet per minute.

Comment 4:

Page 5 – Section A.5(b) – Source Summary

This section should be deleted as the requirements appear to be covered by section B.9 on Page 7.

Response 4:

This Condition has been updated by the IDEM, OAQ. Condition A.5 is no longer covered under Condition B.9.

Comment 5:

Page 18 – Section C.8 – Performance Testing

This section should be deleted from the permit. It was not in the original permit or subsequent permit updates. The testing requirements are not applicable to our equipment, process or facility.

Response 5:

Condition C.8 APerformance Testing® will not be removed. Since this source does not have any testing requirements, this condition would not be applicable to the source at this time. However, the condition is required to stay in the permit because a new facility could be added to the source at some later date. If the new facility has testing requirements, the source will be aware of their responsibilities under the testing requirements. Also, this decreases the number of changes to the permit upon modification and lessens the likelihood of confusion.

Comment 6:

Page 19 – Section C.13 – Actions Related to Non-Compliance Demonstrated by a Stack Test

This section should be deleted from the permit. It was not in the original permit or subsequent permit updates. It was not in previous permitting because the emissions from our production equipment and processes are fugitive and therefore there are no stacks to test. Our small natural gas fired comfort heating boilers would not be subject to this type of testing.

Response 6:

Condition C.13 Actions Related to Noncompliance Demonstrated by a Stack Test will not be removed. Since this permit does not have any testing requirements, this condition would not be applicable to the source at this time. However, the condition is required to stay in the permit because a new facility could be added to the source at some later date. If the new facility has testing requirements, the source will be aware of their responsibilities under the testing requirements. Also, this decreases the number of changes to the permit upon modification and lessens the likelihood of confusion.

Comment 7:

Page 22 – Section D.1.3 – Particulate Matter

We request that the wording “The boilers are in compliance with this rule based on supporting calculations.” be added to the text of this section. This language was in our original FESOP, is still accurate and reflects the language in the technical support document.

Response 7:

Condition D.1.3 of the permit contains the allowable PM emission limit for the four (4) boilers. Compliance with this limit is shown in the Technical Support Document (TSD) and is therefore not required in the permit. Therefore, no changes will be made to the permit as a result of this comment.

Comment 8:

Page 22 – Section D.1.4 – Preventative Maintenance Plan

This paragraph should be deleted in its entirety. All emissions from the production processes are fugitive. There is no pollution control equipment and the equipment and nature of our operations are such that any plan would have no effect on emissions one way or another. Our boilers are natural gas only fired units of a sufficiently small size that maintenance plans are not required.

Response 8:

A Preventative Maintenance Plan (PMP) is not required for any emission units located at the source. Therefore, Condition D.1.4 has been removed as follows:

~~D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]~~

~~A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.~~

Comment 9:

Page 22 – Section D.1.5 – Volatile Organic Compounds (VOC)

For the sake of clarity and accuracy, we suggest the wording be changed to read “Compliance with VOC emission limitations contained in Section D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by ink, varnish and coating manufacturers.” Section D.1.1 contains emission limits but not content and usage limitations per se.

Response 9:

This wording was already incorporated into Condition D.1.5 of the proposed permit as shown below. Therefore there are no changes required.

D.1.5 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by ink, varnish and coating manufacturers.

Comment 10:

Page 22 – Section D.1.9(a)(1) – Recordkeeping Requirements

The wording should be changed to the following for clarity, accuracy and consistency to Section D.1.5. Your proposed language is inaccurate.

“(1) – The amount and VOC content of each ink, varnish and coating material used on a monthly basis. Records may include information from supplier formulation data, supplier sales and consumption data, purchase orders or requisitions, invoices and Material Safety Data Sheets (MSDS) as necessary to verify the type and amount used.”

We need to include data from ink and varnish use not just coating usage. Solvents are used only for clean up purposes and are not added to petroleum and vegetable oil lithographic inks or to aqueous coatings. We believe you may be thinking of the gravure process instead of the offset non-heatset lithography process. The equipment we have can only apply aqueous coatings and cannot apply solvent based coatings.

Response 10:

The wording requested has been added to Condition D.1.9(a) as follows:

D.1.9 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1.
- (1) ~~The amount and VOC content of each coating material and solvent used on a monthly basis. Records shall include purchase orders, or requisitions, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.~~ **ink, varnish and coating material used on a monthly basis. Records shall include information from supplier formulation data, supplier sales and consumption data, purchase orders or requisitions, invoices and Material Safety Data Sheets (MSDS) necessary to verify the type and amount used.** Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents, if any;

Comment 11:

Page 23 – Section D.1.9(a)(2) – Recordkeeping Requirements

This item should be deleted in its entirety and items (3), (4) and (5) should be renumbered to (2),

(3) and (4). Our requirements and emission limitations are on a 12-month rolling basis as reflected in the language of D.1.9(a)(1) and D.1.1. A log of usage data is needless administrative effort with no productive value for recordkeeping or reporting. Monthly records of material usage are appropriate and that requirement is acceptable and is included in existing language on which we agree.

Response 11:

Condition D.1.9(a)(2), has been removed and all subsequent conditions have been re-numbered as follows:

D.1.9 Record Keeping Requirements

(a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through ~~(5)~~ **(4)** below. Records maintained for (1) through ~~(5)~~ **(4)** shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1.

(1) The amount and VOC content of each ink, varnish and coating material used on a monthly basis. Records shall include information from supplier formulation data, supplier sales and consumption data, purchase orders or requisitions, invoices and Material Safety Data Sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents, if any;

~~(2) A log of the dates of use;~~

~~(3)~~**(2)** The cleanup solvent usage for each month;

~~(4)~~**(3)** The total VOC usage for each month; and

~~(5)~~**(4)** The weight of VOCS emitted for each compliance period.

Comment 12:

Page 23 – Section D.1.9(b)(1) – Recordkeeping Requirements

The wording should be changed to the following for clarity, accuracy, and consistency to Section D.1.7. Your proposed language is inaccurate.

“(1) The amount and HAP Content of each ink, varnish and coating material used on a monthly basis. Records may include information from supplier formulation data, supplier sales and consumption data, purchase orders or requisitions, invoices, and material safety data sheets (MSDS) as necessary to verify the type and amount used.”

We need to include data from ink and varnish use not just coating usage. Solvents are used only for clean up purposes and are not added to our petroleum and vegetable oil lithographic inks or to our aqueous coatings. We believe you may be thinking of the gravure process instead of the offset non-heatset lithography process. The equipment we have can only apply aqueous coatings and cannot apply solvent based coatings.

Response 12:

The wording requested has been added to Condition D.1.9(b) as follows:

D.1.9 Record Keeping Requirements

- (b) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (5) below for all significant and insignificant emission units. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the HAP usage limits established in Condition D.1.2.
- (1) ~~The amount and HAP content of each coating material and solvent used. Records shall include purchase orders, or requisitions, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.~~ **ink, varnish and coating material used on a monthly basis. Records shall include information from supplier formulation data, supplier sales and consumption data, purchase orders or requisitions, invoices and Material Safety Data Sheets (MSDS) necessary to verify the type and amount used.** Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents, if any;

Comment 13:

Page 23 – Section D.1.9.(b)(2) – Recordkeeping Requirements

This item should be deleted in its entirety and items (3), (4) and (5) should be renumbered to (2), (3) and (4). Our requirements and emission limitations are on a 12 month rolling basis as reflected in the language of D.1.9(b)(1) and D.1.1. A log of usage dates is needless administrative effort with no productive value for recordkeeping or reporting. Monthly records of material usage are appropriate and that requirement is acceptable and included in existing language on which we agree.

Response 13:

Condition D.1.9(b)(2), has been removed and all subsequent conditions have been re-numbered as follows:

- (b) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through ~~(5)~~ **(4)** below for all significant and insignificant emission units. Records maintained for (1) through ~~(5)~~ **(4)** shall be taken monthly and shall be complete and sufficient to establish compliance with the HAP usage limits established in Condition D.1.2.
- (1) The amount and HAP content of each ink, varnish and coating material used on a monthly basis. Records shall include information from supplier formulation data, supplier sales and consumption data, purchase orders or requisitions, invoices and Material Safety Data Sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents, if any;
- ~~(2)~~ **A log of the dates of use;**
- ~~(3)~~**(2)** The cleanup solvent usage for each month;
- ~~(4)~~**(3)** The total single and combination of HAPS usage for each month; and
- ~~(5)~~**(4)** The weight of single and combination HAPS emitted for each compliance period.

Comment 14:

Page 24 – Section D.2 – Facility Operating Conditions

This section should be deleted in its entirety as it is not applicable to our operation. These are insignificant activities as you have stated and there is no compliance determination requirements or compliance monitoring requirements. We also do not understand the reference to vehicle road dust as we have no roads per se.

Response 14:

Even though the facilities listed in Section D.2 are insignificant activities, these facilities have the potential to emit Particulate Matter (PM) and are therefore subject to the requirements of 326 IAC 6-3-2, thus they must be included in the permit in Section D.2. Condition A.3 (e) as well as Section D.2(e) have had the vehicle traffic road dust deleted and all subsequent equipment has been re-lettered in Condition A.3 as follows:

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Maintenance cleaning and painting
- (b) Experimental material evaluations
- (c) Maintenance parts cleaning
- (d) Washroom exhaust fans, ventilation and air conditioning equipment
- (e) ~~Vehicle traffic road dust (326 IAC 6-3-2)~~
- (f e) Air compressor operations
- (g f) Stacking station dust (326 IAC 6-3-2)
- (h g) Sheeting, cutting, stripping, finishing, and packaging of paperboard (326 IAC 6-3-2)
- (i h) Plate room activities

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (e) ~~Vehicle traffic road dust (326 IAC 6-3-2)~~
- (g f) Stacking station dust (326 IAC 6-3-2)
- (h g) Sheeting, cutting, stripping, finishing, and packaging of paperboard (326 IAC 6-3-2)

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the vehicle traffic, stacking station, sheeting, cutting, stripping, finishing, and packaging of the paperboard facilities shall not exceed the allowable emission rate of particulate matter per hour as determined by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

Comment 15:

Pages 28, 29 and 30 – FESOP Quarterly Reports

It is our strong viewpoint we should continue to use our existing reporting forms as they provide a compliance picture and allow for better discussion with compliance inspectors. Our existing forms were developed with IDEM personnel for the above reasons. The forms are attached for your convenience. Your forms will not demonstrate compliance in our view.

Response 15:

The report forms from the original FESOP, which were accepted by the IDEM, OAQ, will be used as the report forms for this FESOP Renewal as shown as the last two (2) pages of this document.

Comment 16:

We would also like to advise that we had a lightning strike on one of our comfort heating boiler stacks – B4/5. The damage has turned out to be somewhat extensive and we replaced the stack to comply with existing codes and specification requirements. We also discovered that one of our existing boilers (B2/3) requires replacement on an emergency basis. Replacement is required because of age, condition and the recommendation of a boiler inspector who advised not to repair it but to replace it. We will replace boiler B2/3 with a smaller, more efficient natural gas fired (only) unit rated at 4.2 million British thermal units per hour. The new boiler will exhaust through the existing stack B2/3. As we understand our permit and the regulations, we do not require a construction permit to proceed. We would like the new boiler description included in the reissued FESOP (see A.2(b)). We expect the boiler to be installed and fully operational prior to the end of the public comment period. We believe you can make the change to the reissued FESOP as an administrative change.

Response 16:

It has been noted that the source replaced Stack B4/5 with a similar stack, with the same designation, due to a lightning strike which caused extensive damage. The boiler replacement results in the following changes:

- 1: Due to the change in boilers, the following is the new Unrestricted Potential to Emit Table:

Pollutant	Unrestricted Potential Emissions (tons/year)
PM	11.2
PM ₁₀	11.6
SO ₂	0.047 0.044
VOC	60.6
CO	6.59 6.21
NO _x	7.84 7.38

HAPS	Unrestricted Potential Emissions (tons/year)
Benzene	0.0002
Glycol Ethers	5.76
Dichlorobenzene	0.00009 0.00008
Formaldehyde	0.006
Hexane	0.141 0.132
Toluene	0.0003
Lead	0.00004
Cadmium	0.00009
Chromium	0.0001
Manganese	0.00003
Nickel	0.0002
TOTAL	5.94 5.90

- 2: The new boiler, identified as B2/3, is subject to the requirements of 326 IAC 6-2-4, as follows:

326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983)

The one (1) natural gas fired boiler, identified as B2/3, installed in 2001, rated at 4.2 million British thermal units per hour, must comply with the requirements of 326 IAC 6-2-4. The emission limitation is based on the following equation is given in 326 IAC 6-2-4:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/mmBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

The total heat input capacity for the source, including the 4.2 million British thermal units per hour boiler, is 16.8 million British thermal units per hour.

$$Pt = 1.09/(16.8)^{0.26} = 0.523 \text{ lb/mmBtu heat input}$$

Based on Appendix A, the potential PM emission rate is:

$$0.140 \text{ ton/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.032 \text{ lb/hr}$$
$$(0.032 \text{ lb/hr} / 16.8 \text{ mmBtu/hr}) = 0.002 \text{ lb PM per mmBtu}$$

The PM emissions from the one (1) natural gas fired boiler are 0.002 pound PM per million British thermal units per hour, which is less than the allowable of 0.523 pound per million British thermal units per hour. Therefore, the one (1) natural gas fired boiler is in compliance with this rule.

- 3: Condition A.2 (b) as well as Section D.1 (b) has been changed as follows to show the replacement of boiler B2/3 rated at 5.25 million British thermal units per hour with a new boiler, designated as B2/3, rated at 4.2 million British thermal units per hour.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (b) One (1) natural gas fired boiler, identified as B2/3, ~~installed prior to June 8, 1972~~ **installed in 2001**, exhausting to Stack B2/3, rated at ~~5.25~~ **4.2** million British thermal units per hour.
- 4: Condition D.1.3 in the permit has been updated to account for the removal of the original boiler, identified as B2/3, as follows:

D.1.3 Particulate Matter (PM) [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3(d), the allowable PM emission rate from the ~~four~~ **three (3)** natural gas fired boilers, **identified as B1, B4/5A, and B4/5B** shall not exceed 0.8 pounds per million British thermal units heat input, each. **The boilers are in compliance with this rule based on supporting calculations.**

- 5: Condition D.1.4 has been added to the permit to account for the new boiler, identified as B2/3, which is subject to 326 IAC 6-2-4, and all subsequent conditions in Section D.1 have been renumbered.

D.1.4 Particulate Matter (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983), the allowable PM emission rate from the one (1) boiler, identified as B2/3 shall not exceed 0.523 pounds per million British thermal units per hour when operating at 4.2 million British thermal units per hour heat input. This boiler is in compliance with this

rule based on supporting calculations.

The emission limitation is based on the following equation:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/mmBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the name-plate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

Comment 17:

Please change the telephone number from 219-461-7200 to 260-461-7200 on page 4 of 32, Section A.1, General Information.

Response 17:

Section A.1 has been revised as follows:

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary paperboard folding carton manufacturing source.

Authorized Individual:	Jim R. Stanley
Source Address:	102 West Superior Street, Fort Wayne, Indiana 46802-1283
Mailing Address:	102 West Superior Street, Fort Wayne, Indiana 46802-1283
General Source Phone Number:	219-260 -461-7200
SIC Code:	2657
County Location:	Allen
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act

On November 19, 2001, Erin I. Surinak, P.E., consultant, on behalf of Jefferson Smurfit Corporation (U.S.), submitted additional comments on the proposed FESOP Renewal. The summary of the comments is as follows:

Comment 1:

Section A2 (b) and (b) found in the description box in Section D.1 The boiler described in these sections is being replaced by a smaller boiler, such that the description should be changed to the following:

One (1) natural gas fired boiler, identified as B2/3, installed in 2001, exhausting to Stack B2/3, rated at 4.2 million British thermal units per hour.

Response 1:

Please see Response 16.

Comment 2:

Condition D.1.3 Particulate Matter (PM) and associated pages of TSD

As a result of the replacement of Boiler B2/3, Condition D.1.3 and the calculations found in the TSD should be revised. The replacement boiler would be subject to 326 IAC 6-2-4 Emission Limitations for Facilities Specified in 326 IAC 6-2-1(d), which applies to boilers constructed after September 21, 1983. This regulation will limit the PM emissions from the boiler to 0.52 lb/MMBtu, using the formula $Pt = 1.09/(Q^{0.26})$ and a combined heat input (Q) of 16.2 MMBtu/hr. Additionally, the calculations found in the TSD for the three remaining boilers (B1, B4/5A and B4/5B) would need to be revised to reflect the new combined heat input of 16.2 MMBtu/hr; however, these three boilers would still be limited to 0.8 lb/MMBtu. Therefore, Condition D.1.3 should be revised as follows:

Pursuant to 326 IAC 6-2-3(d), the allowable PM emission rate from natural gas fired boilers B1, B4/5A and B4/5B shall not exceed 0.8 pounds per million British thermal units heat input, each. The allowable PM emission rate from natural gas fired boiler B2/3 shall not exceed 0.52 pounds per million British thermal units heat input.

Response 2:

Please see Response 16.

Upon further review, the OAQ has decided to make the following changes to the FESOP: The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded**):

Change 1:

Condition A.5 Prior Permits Superseded replaced Prior Permit Conditions in the proposed permit to implement the intent of the new rule 326 IAC 2-1.1-9.5 as follows:

~~A.5 Prior Permit Conditions~~

- ~~(a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.~~
- ~~(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.~~

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either**
 - (1) incorporated as originally stated,**
 - (2) revised, or**

(3) ~~deleted~~

by this permit.

(b) **All previous registrations and permits are superseded by this permit.**

Change 2:

The IDEM, OAQ, has revised Condition B.15 Deviations from Permit Requirements and Conditions of the permit to address concerns regarding the independent enforceability of permit conditions [see 326 IAC 2-8-4(5)]. Condition B.15 was revised to remove language that could be considered to grant exemptions from permit requirements and to clarify reporting obligations.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch **Data Section**, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. ~~Deviations that are required to be reported by an applicable requirement~~ **A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit** shall be reported according to the schedule stated in the applicable requirement and ~~do~~ **does** not need to be included in this report.

~~The notification by the Permittee~~ **Quarterly Deviation and Compliance Monitoring Report** does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit ~~or a rule. It does not include:~~

(1) ~~An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or~~

(2) ~~Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.~~

~~A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.~~

(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

Change 3:

Conditions C.3, C.4, and C.5, have had the reference to "not federally enforceable" deleted because pursuant to 326 IAC 2-8-6(b), all terms and conditions in a FESOP, including any provisions designed to limit a source's potential to emit, are enforceable by the U.S. EPA as follows:

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. ~~326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.~~

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2. ~~326 IAC 9-1-2 is not federally enforceable.~~

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). ~~326 IAC 6-4-2(4) is not federally enforceable.~~

Change 4:

326 IAC 2-8-3 requires any application form, report, or compliance certification to be certified by the Authorized Individual. IDEM, OAQ has revised Condition C.7 Asbestos Abatement Projects to clarify that the asbestos notification does not require a certification by the authorized individual, but it does need to be certified by the owner or operator. IDEM, OAQ has revised Condition C.13 Actions Related to Noncompliance Demonstrated by a Stack Test; a certification by the authorized individual is required for the notification sent in response to non-compliance with a stack test:

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test[326 IAC 2-8-4][326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition ~~does not~~ require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Jefferson Smurfit Corporation (U.S.)
Source Address: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
Mailing Address: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
FESOP No.: F 003-14129-00033
Facility: Three (3) sheet-fed (non-heatset) printing presses
Parameter: Total VOC
Limit: Less than twenty-five (25) tons per year, each. The volatile content of each of the printing inks, shall be multiplied by a 5% emission factor and the volatile content of each varnish and aqueous coatings shall be multiplied by a 60% emission factor to obtain VOC emissions. The volatile content of each of the solvents, washes and solutions shall be multiplied by a 100% emission factor to obtain VOC emissions.

YEAR: _____ Month _____

Facility ID	Month	VOC Emitted This Month	VOC Emitted Previous 11 Months	VOC Emitted 12 Month Total
Press P-100	Month 1			
	Month 2			
	Month 3			
Press P-120	Month 1			
	Month 2			
	Month 3			
Press P-140	Month 1			
	Month 2			
	Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Note: This report shall include a detailed spreadsheet with the raw material usage, showing on how the emissions were derived.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Jefferson Smurfit Corporation (U.S.)
Source Address: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
Mailing Address: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
FESOP No.: F 003-14129-00033
Facility: Entire Source
Parameter: Total worst case single HAP
Limit: Less than ten (10) tons per twelve (12) consecutive month period

YEAR: _____ Month _____

Month	Single HAP Emitted This Month	Single HAP Emitted Previous 11 Months	Single HAP Emitted 12 Month Total	Combined HAP Emitted This Month	Combined HAP Emitted Previous 11 Months	Combined HAP Emitted 12 Month Total
Month 1						
Month 2						
Month 3						

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Note: This report shall include a detailed spreadsheet with the raw material usage, showing on how the emissions were derived.

**Indiana Department of Environmental Management
Office of Air Quality**

**Technical Support Document (TSD)
for a Federally Enforceable State Operating Permit (FESOP) Renewal**

Source Background and Description

Source Name:	Jefferson Smurfit Corporation (U.S.)
Source Location:	102 West Superior Street, Fort Wayne, Indiana 46802-1283
County:	Allen
SIC Code:	2657
Operation Permit No.:	F 003-14129-00033
Permit Reviewer:	Craig J. Friederich

The Office of Air Quality (OAQ) has reviewed a FESOP renewal application from Jefferson Smurfit Corporation (U.S.) relating to the operation of a paperboard folding carton manufacturing source. Jefferson Smurfit Corporation (U.S.) was issued FESOP 003-5349, on December 9, 1996 that will expire on December 9, 2001.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) natural gas fired boiler, identified as B1, installed prior to June 8, 1972, exhausting to Stack B1, rated at 4.2 million British thermal units per hour.
- (b) One (1) natural gas fired boiler, identified as B2/3, installed prior to June 8, 1972, exhausting to Stack B2/3, rated at 5.25 million British thermal units per hour.
- (c) One (1) natural gas fired boiler, identified as B4/5A, installed prior to June 8, 1972, exhausting to Stack B4/5, rated at 4.2 million British thermal units per hour.
- (d) One (1) natural gas fired boiler, identified as B4/5B, installed prior to June 8, 1972, exhausting to Stack B4/5, rated at 4.2 million British thermal units per hour.
- (e) One (1) sheet-fed (non-heatset) printing press with no control equipment, identified as P-120, installed in 1989, with a maximum print width of 40 inches, capacity: 500 feet per minute.
- (f) One (1) sheet-fed (non-heatset) printing press with no control equipment, identified as P-100, installed in 1997, with a maximum print width of 40 inches, capacity: 583 feet per minute.
- (g) One (1) sheet-fed (non-heatset) printing press with no control equipment, identified as P-140, installed in 2001, with a maximum print width of 55.12 inches, capacity: 547 feet per minute.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Maintenance cleaning and painting
- (b) Experimental material evaluations
- (c) Maintenance parts cleaning
- (d) Washroom exhaust fans, ventilation and air conditioning equipment
- (e) Vehicle traffic road dust (326 IAC 6-3-2)
- (f) Air compressor operations
- (g) Stacking station dust (326 IAC 6-3-2)
- (h) Sheeting, cutting, stripping, finishing, and packaging of paperboard (326 IAC 6-3-2)
- (i) Plate room activities

Existing Approvals

- (a) F 003-5349-00033, issued on December 9, 1996, and expires December 9, 2001.
- (b) AAF 003-8283-00033, issued April 2, 1997.
- (c) Name Change 003-10531-00033, issued March 9, 1999.
- (d) 003-10873-00033, issued January 26, 2001.

All conditions from previous approvals were incorporated into this FESOP.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the FESOP renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP renewal application for the purposes of this review was received on March 7, 2001.

There was no notice of completeness letter mailed to the source.

Emission Calculations

See Appendix A (Pages 1 through 12 of 12) of this document for detailed emissions calculations.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source, excluding the emission limits that were contained in the previous FESOP.

Pollutant	Unrestricted Potential Emissions (tons/year)
PM	11.2
PM ₁₀	11.6
SO ₂	0.047
VOC	60.6
CO	6.59
NO _x	7.84

Note: For the purpose of determining Title V applicability for particulates, PM₁₀, not PM, is the regulated pollutant in consideration.

HAPs	Unrestricted Potential Emissions (tons/year)
Benzene	0.0002
Glycol Ethers	5.76
Dichlorobenzene	0.00009
Formaldehyde	0.006
Hexane	0.141
Toluene	0.0003
Lead	0.00004
Cadmium	0.00009
Chromium	0.0001
Manganese	0.00003
Nickel	0.0002
TOTAL	5.91

- (a) While the potential to emit (as defined in 326 IAC 2-1.1-1(16)) of all criteria pollutants are less than 100 tons per year and the potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-1.1-1(16)) of a combination HAPs is less than twenty-five (25) tons per year, the source has requested a FESOP in order to maintain flexibility in the solvents used in their printing operation. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Potential to Emit After Issuance

The source, issued a FESOP on December 9, 1996 has opted to remain a FESOP source, rather than apply for a Part 70 Operating Permit. The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of this Federally Enforceable State Operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit. Since the source has not constructed any new emission units, the source's potential to emit is based on the emission units included in the original FESOP. (F 003-5349-00033; issued on December 9, 1996).

	Potential to Emit After Issuance (tons/year)						
Process/emission unit	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Three (3) sheet-fed (non-heatset) printing presses (P-100, P-120, P-140)	-	-	-	Less than 25 tons per year, each	-	-	Total Single HAP less than 10, total combined HAPs less than 25
Four (4) natural gas fired boilers	0.149	0.596	0.047	0.431	6.59	7.84	
Insignificant Activities	11.0	11.0	-	24.6 tons per year	-	-	
Total PTE After Issuance	11.2	11.6	0.047	less than 100 tons per year	6.59	7.84	Single less than 10 tons per year Total less than 25 tons per year

County Attainment Status

The source is located in Allen County.

Pollutant	Status (attainment, maintenance attainment or unclassifiable; severe, moderate, marginal, or nonattainment)
PM ₁₀	Attainment
SO ₂	Attainment
NO ₂	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Allen County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

- (a) The four (4) natural gas fired boilers are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.40, Subpart Dc), because the rating of each of these boilers is less than ten (10) million British thermal units per hour.
- (b) The three (3) sheet-fed (non-heatset) printing presses are not subject to the requirements of the new Source Performance Standard, 326 IAC 12, (40 CFR Part 60.430, Subpart QQ), because these presses are not a publication rotogravure printing press. They are Offset Lithographic printing presses used in the manufacture of paperboard containers.
- (c) The three (3) sheet-fed (non-heatset) printing presses are not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart KK because they are not a rotogravure press or a flexographic printing press, nor is it a major source for HAPS emissions.

State Rule Applicability - Entire Source

326 IAC 2-4.1-1 (New Source Toxics Control)

This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments. Therefore, 326 IAC 2-4.1-1 is not applicable.

326 IAC 2-6 (Emission Reporting)

This source is located in Allen County and the potential to emit all criteria pollutants is less than one hundred (100) tons per year. Therefore 325 IAC 2-6 does not apply.

326 IAC 2-8-4 (FESOP)

Pursuant to this rule, the amount of PM₁₀, SO₂, VOC, CO and NO_x shall be limited to less than one hundred (100) tons per year. In addition, the amount of a single HAP shall be limited to less than ten (10) tons per year and the combination of all HAPs shall be limited to less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 2-7, do not apply.

326 IAC 5-1 (Visible Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR Part 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-2-3 (Particulate Emissions Limitations for Facilities Constructed prior to September 21, 1983)

- (a) The one (1) boiler, identified as B1, constructed and placed into operation prior to June 8, 1972, with a total source heat input capacity of 17.85 million British thermal units per hour, must comply with the PM emission limitation of 326 IAC 6-2-3. This limitation is based on the following equation is given in 326 IAC 6-2-3:

$$Pt = C \times a \times h / 76.5 \times Q^{0.75} \times N^{0.25}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBTU) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

C = Maximum ground level concentration with respect to distance from the point source at the "critical" wind speed for level terrain. This shall equal 50 micrograms per cubic meter for a period not to exceed a sixty (60) minute time period.

N = Number of stacks in fuel burning operation.

a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000 MMBtu/hr heat input. The value 0.8 shall be used for Q greater than 1,000 MMBtu/hr heat input.

h = Stack height in feet.

For the one (1) boiler:

$$Pt = 50 \times 0.67 \times 72.0 / 76.5 \times (17.85)^{0.75} \times 1^{0.25} = 3.63 \text{ lb/MMBtu}$$

Pursuant to 326 IAC 6-2-3(d), Pt for all facilities used for indirect heating purposes which were existing and in operation on or before June 8, 1972 shall not exceed 0.8 pound per million British thermal units. Therefore, the one (1) boiler is limited to emissions of 0.8 pound per million British thermal units.

Based on Appendix A, the potential to emit PM emissions from the one (1) natural gas fired boiler, identified as B 1, rated at 4.20 million British thermal units per hour, is 0.140 tons per year.

$$0.140 \text{ tons/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.032 \text{ pounds/hr}$$
$$(0.032 \text{ pounds/hr} / 4.20 \text{ MMBtu/hr}) = 0.008 \text{ pound PM / MMBtu}$$

Therefore, the one (1) natural gas fired boiler, identified as B 1, will comply with this rule.

- (b) The one (1) boiler, identified as B2/3, constructed and placed into operation prior to June 8, 1972, with a total source heat input capacity of 17.85 million British thermal units per hour, must comply with the PM emission limitation of 326 IAC 6-2-3. This limitation is based on the following equation is given in 326 IAC 6-2-3:

$$Pt = C \times a \times h / 76.5 \times Q^{0.75} \times N^{0.25}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

C = Maximum ground level concentration with respect to distance from the point source at the "critical" wind speed for level terrain. This shall equal 50 micrograms per cubic meter for a period not to exceed a sixty (60) minute time period.

N = Number of stacks in fuel burning operation.

a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000 MMBtu/hr heat input. The value 0.8 shall be used for Q greater than 1,000 MMBtu/hr heat input.

h = Stack height in feet.

For the one (1) boiler:

$$Pt = 50 \times 0.67 \times 72.0 / 76.5 \times (17.85)^{0.75} \times 1^{0.25} = 3.63 \text{ lb/MMBtu}$$

Pursuant to 326 IAC 6-2-3(d), Pt for all facilities used for indirect heating purposes which

were existing and in operation on or before June 8, 1972 shall not exceed 0.8 pound per million British thermal units. Therefore, the one (1) boiler is limited to emissions of 0.8 pound per million British thermal units.

Based on Appendix A, the potential to emit PM emissions from the one (1) natural gas fired boiler, identified as B 2/3, rated at 5.25 million British thermal units per hour, is 0.175 tons per year.

$$0.175 \text{ tons/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.040 \text{ pounds/hr}$$
$$(0.040 \text{ pounds/hr} / 5.25 \text{ MMBtu/hr}) = 0.008 \text{ pound PM / MMBtu}$$

Therefore, the one (1) natural gas fired boiler, identified as B 2/3, will comply with this rule.

- (c) The two (2) boilers, identified as B 4/5A and B 4/5B, each constructed and placed into operation prior to June 8, 1972, with a total source heat input capacity of 17.85 million British thermal units per hour, must comply with the PM emission limitation of 326 IAC 6-2-3. This limitation is based on the following equation is given in 326 IAC 6-2-3:

$$Pt = C \times a \times h / 76.5 \times Q^{0.75} \times N^{0.25}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

C = Maximum ground level concentration with respect to distance from the point source at the "critical" wind speed for level terrain. This shall equal 50 micrograms per cubic meter for a period not to exceed a sixty (60) minute time period.

N = Number of stacks in fuel burning operation.

a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000 MMBtu/hr heat input. The value 0.8 shall be used for Q greater than 1,000 MMBtu/hr heat input.

h = Stack height in feet.

For the two (2) boilers:

$$Pt = 50 \times 0.67 \times 45.0 / 76.5 \times (17.85)^{0.75} \times 1^{0.25} = 2.27 \text{ lb/MMBtu}$$

Pursuant to 326 IAC 6-2-3(d), Pt for all facilities used for indirect heating purposes which were existing and in operation on or before June 8, 1972 shall not exceed 0.8 pound per million British thermal units. Therefore, the one (1) boiler is limited to emissions of 0.8 pound per million British thermal units.

Based on Appendix A, the potential to emit PM emissions from the two (2) natural gas fired boilers, identified as B 4/5A and B 4/5B, rated at 4.20 million British thermal units per hour,

each, is 0.140 tons per year, each.

$$0.140 \text{ tons/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.032 \text{ pounds/hr} \\ (0.032 \text{ pounds/hr} / 4.20 \text{ MMBtu/hr}) = 0.008 \text{ pound PM} / \text{MMBtu}$$

Therefore, the two (2) natural gas fired boilers, identified as B 4/5A and B 4/5B, will comply with this rule.

326 IAC 8-1-6 (New facilities; General reduction requirements)

The requirements of 326 IAC 8-1-6 are not applicable to the three (3) sheet-fed (non-heatset) printing presses because the potential to emit VOC from each of these facilities is less than twenty-five (25) tons per year. The source is also taking a limit of less than twenty-five (25) tons per year of VOC input usage from these presses to ensure compliance with this rule should the solvents used at these presses change.

326 IAC 8-5-5 (Miscellaneous Operations: Graphic Arts Operations)

The requirements of 326 IAC 8-5-5 are not applicable to the three (3) sheet-fed (non-heatset) printing presses because these presses are not a packaging rotogravure, publication rotogravure, nor flexographic printing source. It is an Offset Lithographic printing operation.

State Rule Applicability - Insignificant Activities

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the stacking station, sheeting, cutting, stripping, finishing, and packaging of the paperboard facilities shall not exceed the allowable emission rate of particulate matter per hour as determined by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

Testing Requirements

There is no testing required at this source. Emission calculations for the four (4) natural gas fired boilers are based on AP-42 emission factors. Emission calculations for the three (3) sheet-fed (non-heatset) printing presses are based on usage and information from Material Safety Data Sheets.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The three (3) sheet-fed (non-heatset) printing presses do not have any applicable compliance monitoring conditions. There are no dry filters located at these presses.

Conclusion

The operation of this paperboard folding carton manufacturing source shall be subject to the conditions of the attached proposed FESOP Renewal No.: F 003-14129-00033.

Appendix A: Emissions Calculations
VOC From Printing Press Operations

Company Name: Jefferson Smurfit Corporation (U.S.)
Address City IN Zip: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
FESOP Renewal: F 003-14129
Plt ID: 003-00033
Reviewer: Craig J. Friederich
Date: March 7, 2001

THROUGHPUT			
Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin^2/YEAR
P-140	547	55.12	190166

INK VOCS					
Ink Name Press Id	Maxium Coverage '(lbs/MMin^2)	Weight % Volatiles*	Flash Off %	Throughput (MMin^2/Year)	Emissions (tons/year)
Printing Ink	3	29%	5.00%	190166	4.14
Varnish	3	29%	5.00%	190166	4.14
Aqueous Coating	4.5	1%	5.00%	190166	0.21
Cleaning Solvent	0.00582	100%	100.00%	190166	0.55
Fountain Wash	0.10046	16%	100.00%	190166	1.53
Blanket Wash	0.1383	98%	100.00%	190166	12.9

Total VOC Emissions =	23.5 Ton/yr
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*VOC (Tons/Year) = Maximum Coverage pounds per MMin^2 * Weight % volatiles (weight % of water & organics - weight % of water = weight % organics) * Flash off * Throughput * 1 Ton per 2000 pounds

METHODOLOGY

Throughput = Maxium line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MMin^2 per Year

VOC = Maximum Coverage pounds per MMin^2 * Weight percentage volatiles (water minus organics) * Flash off * Throughput * Tons per 2000 pounds = Tons per Year

NOTE: HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80%. OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%.

(Source -OAQPS Draft Guidance, "Control of Volatile Organic Compound Emissions from Offset Lithographic Printing (9/93))

Appendix A: Emissions Calculations

VOC From Printing Press Operations

Company Name: Jefferson Smurfit Corporation (U.S.)
Address City IN Zip: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
FESOP Renewal: F 003-14129
Plt ID: 003-00033
Reviewer: Craig J. Friederich
Date: March 7, 2001

THROUGHPUT			
Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin^2/YEAR
P-120	500	40	126144

INK VOCS					
Ink Name Press Id	Maxium Coverage '(lbs/MMin^2)	Weight % Volatiles*	Flash Off %	Throughput (MMin^2/Year)	Emissions (tons/year)
Printing Ink	3	29%	5.00%	126144	2.74
Varnish	3	29%	5.00%	126144	2.74
Aqueous Coating	4.5	1%	5.00%	126144	0.14
Cleaning Solvent	0.00582	100%	100.00%	126144	0.37
Fountain Wash	0.10046	16%	100.00%	126144	1.01
Blanket Wash	0.1383	98%	100.00%	126144	8.55

Total VOC Emissions =	15.6 Ton/yr
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*VOC (Tons/Year) = Maximum Coverage pounds per MMin^2 * Weight % volatiles (weight % of water & organics - weight % of water = weight % organics) * Flash off * Throughput * 1 Ton per 2000 pounds

METHODOLOGY

Throughput = Maxium line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MMin^2 per Year

VOC = Maximum Coverage pounds per MMin^2 * Weight percentage volatiles (water minus organics) * Flash off * Throughput * Tons per 2000 pounds = Tons per Year

NOTE: HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80%. OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%.

(Source -OAQPS Draft Guidance, "Control of Volatile Organic Compound Emissions from Offset Lithographic Printing (9/93))

Appendix A: Emissions Calculations
VOC From Printing Press Operations

Company Name: Jefferson Smurfit Corporation (U.S.)
Address City IN Zip: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
FESOP Renewal: F 003-14129
Plt ID: 003-00033
Reviewer: Craig J. Friederich
Date: March 7, 2001

THROUGHPUT			
Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin^2/YEAR
P-100	583	40	147084

INK VOCS					
Ink Name Press Id	Maxium Coverage '(lbs/MMin^2)	Weight % Volatiles*	Flash Off %	Throughput (MMin^2/Year)	Emissions (tons/year)
Printing Ink	3	29%	5.00%	147084	3.20
Varnish	3	29%	5.00%	147084	3.20
Aqueous Coating	4.5	1%	5.00%	147084	0.17
Cleaning Solvent	0.00582	100%	100.00%	147084	0.43
Fountain Wash	0.10046	16%	100.00%	147084	1.18
Blanket Wash	0.1383	98%	100.00%	147084	9.97

Total VOC Emissions =	18.1 Ton/yr
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*VOC (Tons/Year) = Maximum Coverage pounds per MMin^2 * Weight % volatiles (weight % of water & organics - weight % of water = weight % organics) * Flash off * Throughput * 1 Ton per 2000 pounds

METHODOLOGY

Throughput = Maxium line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MMin^2 per Year

VOC = Maximum Coverage pounds per MMin^2 * Weight percentage volatiles (water minus organics) * Flash off * Throughput * Tons per 2000 pounds = Tons per Year

NOTE: HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80%. OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%.

(Source -OAQPS Draft Guidance, "Control of Volatile Organic Compound Emissions from Offset Lithographic Printing (9/93))

Appendix A: Emissions Calculations
HAP Emissions From Printing Press Operations

Page 4 of 12 TSD App A

Company Name: Jefferson Smurfit Corporation (U.S.)
Address City IN Zip: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
FESOP Renewal: F 003-14129
Plt ID: 003-00033
Reviewer: Craig J. Friederich
Date: March 7, 2001

INK VOCS				
Ink Name Press Id	Maxium Coverage '(lbs/MMin^2)	Weight % Glycol Ethers*	Throughput (MMin^2/Year)	Emissions (tons/year)
P-100 Fountain Wash	0.10046	35%	147084	2.59
P-120 Fountain Wash	0.10046	35%	126144	2.22
P-140 Fountain Wash	0.10046	10%	190166	0.96

Total HAP Emissions =	5.76 Ton/yr
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*VOC (Tons/Year) = Maximum Coverage pounds per MMin^2 * Weight % volatiles (weight % of water & organics - weight % of water = weight % organics) * Flash off * Throughput * 1 Ton per 2000 pounds

METHODOLOGY

Throughput = Maxium line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MMin^2 per Year

VOC = Maximum Coverage pounds per MMin^2 * Weight percentage volatiles (water minus organics) * Flash off * Throughput * Tons per 2000 pounds = Tons per Year

NOTE: HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80%. OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%.

(Source -OAQPS Draft Guidance, "Control of Volatile Organic Compound Emissions from Offset Lithographic Printing (9/93))

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler**

Page 5 of 12 TSD App A

**Company Name: Jefferson Smurfit Corporation (U.S.)
Address City IN Zip: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
FESOP Renewal: F 003-14129
Plt ID: 003-00033
Reviewer: Craig J. Friederich
Date: March 7, 2001**

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

4.20

36.79

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	Emission Factor in lb/MMCF	Emission Factor in lb/MMCF	Emission Factor in lb/MMCF	Emission Factor in lb/MMCF	Emission Factor in lb/MMCF	Emission Factor in lb/MMCF
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.035	0.140	0.011	1.84	0.101	1.55

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 6 for HAPs emissions calculations.

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****Small Industrial Boiler****HAPs Emissions****Company Name: Jefferson Smurfit Corporation (U.S.)****Address City IN Zip: 102 West Superior Street, Fort Wayne, Indiana 46802-1283****FESOP Renewal: F 003-14129****Plt ID: 003-00033****Reviewer: Craig J. Friederich****Date: March 7, 2001****HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	3.863E-05	2.208E-05	1.380E-03	3.311E-02	6.255E-05

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total HAPs
Potential Emission in tons/yr	9.198E-06	2.024E-05	2.575E-05	6.990E-06	3.863E-05	0.035

Methodology is the same as page 5.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler**

Page 7 of 12 TSD App A

**Company Name: Jefferson Smurfit Corporation (U.S.)
Address City IN Zip: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
FESOP Renewal: F 003-14129
Plt ID: 003-00033
Reviewer: Craig J. Friederich
Date: March 7, 2001**

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

4.2

36.79

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	Emission Factor in lb/MMCF	Emission Factor in lb/MMCF	Emission Factor in lb/MMCF	Emission Factor in lb/MMCF	Emission Factor in lb/MMCF	Emission Factor in lb/MMCF
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.035	0.140	0.011	1.84	0.101	1.55

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 8 for HAPs emissions calculations.

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****Small Industrial Boiler****HAPs Emissions****Company Name: Jefferson Smurfit Corporation (U.S.)****Address City IN Zip: 102 West Superior Street, Fort Wayne, Indiana 46802-1283****FESOP Renewal: F 003-14129****Plt ID: 003-00033****Reviewer: Craig J. Friederich****Date: March 7, 2001****HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	3.863E-05	2.208E-05	1.380E-03	3.311E-02	6.255E-05

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total HAPs
Potential Emission in tons/yr	9.198E-06	2.024E-05	2.575E-05	6.990E-06	3.863E-05	0.035

Methodology is the same as page 7.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler**

**Company Name: Jefferson Smurfit Corporation (U.S.)
Address City IN Zip: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
FESOP Renewal: F 003-14129
Plt ID: 003-00033
Reviewer: Craig J. Friederich
Date: March 7, 2001**

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

4.2

36.79

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	Emission Factor in lb/MMCF					
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.035	0.140	0.011	1.84	0.101	1.55

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 10 for HAPs emissions calculations.

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****Small Industrial Boiler****HAPs Emissions****Company Name: Jefferson Smurfit Corporation (U.S.)****Address City IN Zip: 102 West Superior Street, Fort Wayne, Indiana 46802-1283****FESOP Renewal: F 003-14129****Plt ID: 003-00033****Reviewer: Craig J. Friederich****Date: March 7, 2001****HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	3.863E-05	2.208E-05	1.380E-03	3.311E-02	6.255E-05

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total HAPs
Potential Emission in tons/yr	9.198E-06	2.024E-05	2.575E-05	6.990E-06	3.863E-05	0.035

Methodology is the same as page 9.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler**

Page 11 of 12 TSD App A

**Company Name: Jefferson Smurfit Corporation (U.S.)
Address City IN Zip: 102 West Superior Street, Fort Wayne, Indiana 46802-1283
FESOP Renewal: F 003-14129
Plt ID: 003-00033
Reviewer: Craig J. Friederich
Date: March 7, 2001**

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

4.2

36.79

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	Emission Factor in lb/MMCF	Emission Factor in lb/MMCF	Emission Factor in lb/MMCF	Emission Factor in lb/MMCF	Emission Factor in lb/MMCF	Emission Factor in lb/MMCF
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.035	0.140	0.011	1.84	0.101	1.55

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 12 for HAPs emissions calculations.

Appendix A: Emissions Calculations**Page 12 of 12 TSD App A****Natural Gas Combustion Only****MM BTU/HR <100****Small Industrial Boiler****HAPs Emissions****Company Name: Jefferson Smurfit Corporation (U.S.)****Address City IN Zip: 102 West Superior Street, Fort Wayne, Indiana 46802-1283****FESOP Renewal: F 003-14129****Plt ID: 003-00033****Reviewer: Craig J. Friederich****Date: March 7, 2001****HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	3.863E-05	2.208E-05	1.380E-03	3.311E-02	6.255E-05

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total HAPs
Potential Emission in tons/yr	9.198E-06	2.024E-05	2.575E-05	6.990E-06	3.863E-05	0.035

Methodology is the same as page 11.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.